1 November 1971

MEMORANDUM FOR: Director, Office of Computer Services

SUBJECT: Comparison of Disk Drives from CDC, CALCOMP, and IBM

Attached are two charts which are self-explanatory and give the pertinent capabilities, costs, and measurements. I believe that the average access times are the most pertinent performance measurements, and CDC and CALCOMP are equal. Access measurement in actual running varies considerably because of contention problems of particular applications and mixes of applications and systems. We are extensively measuring performance of CALCOMP now; and so far it has been excellent-- much superior to the IBM drives. I have no reason to believe that the CDC drives might outperform the CALCOMP.

STATOTHR

Chief
Operations Division

Attached: Performance charts.

IBM 2314 Single Density (Dual Density not Available.)

Control Unit	1	2	3	4
	5	6	7	8

47 sq. ft.

CDC 23142-4 (Dual Density.)

Control Unit	1	2	3	4

35 sq. ft.

CALCOMP 1015-215 (Dual Density.)

Control Unit	1	2
	3	4

20 sq. ft.

Performance

	IBM 2314/2319	CDC 23142-4	CALCOMP 1015-215
Capacity (million)	233.4	233.4	233.4
Min Access (MS)	25	7	12
Max Access (MS)	130	70	55
Avg Access (MS)	60	35	35
Space (sq. ft.)	47	35	19.9
Cost 233m bytes	$4,628	$3,270	$3,130

Cost for 233.4 M Bytes

	IBM 2314/2319	CDC 23142-4	CALCOMP 1015-215
Base	4480	2740	3130
Extra Use	148	-	-
Maintenance	-	530	-
Total Mo Charge	$4,628	$3,270	$3,130